POLISHING APPARATUS AND METHOD OF BONDING AND REMOVING EXPENDABLE REPLACEMENT COMPONENTS THEREOF

ABSTRACT OF THE DISCLOSURE

A polishing apparatus includes a top ring for holding a substrate and a polishing table having a polishing 5 surface. The substrate held by the top ring is brought into contact with the polishing surface, and in this state, the polishing table and the substrate are moved relative to each other to thereby polish the substrate. Expendable 10 replacement components to be bonded to the top ring and the polishing table, such as a backing film, a pressure ring and a polishing cloth, are bonded in such a manner that pieces of heat-sensitive adhesive tape are interposed between the expendable replacement components on the one hand and the top ring and the polishing table on the other. 15 The heat-sensitive adhesive tape is switchable between a non-adhesive state and a adhesive state according to whether the temperature thereof is higher or lower than a predetermined set temperature. Thus, the expendable replacement components can be bonded and removed extremely 20 easily by the temperature control of the heat-sensitive adhesive tape.